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#### NOTICE OF ALLOWANCE AND FEE(S) DUE

22850	7590	11/25/2009		EXAMINER				
BLON,	BLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, L.L.P.		LE,	ноа т				
940 DUK	E STREET			ART UNIT	PAPER NUMBER			

ALEXANDRIA, VA 22314

DATE MAILED: 1/125/2009

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/539 509	12/07/2005	Klans Schultes	272983US0PCT	4808

TITLE OF INVENTION: CORE AND SHELL PARTICLE FOR MODIFYING IMPACT RESISTANCE OF A MOULDABLE POLY (METH) ACRYLATE MATERIAL.

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	02/25/2010

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 1SI. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FIEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

#### PART B - FEE(S) TRANSMITTAL

# Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This appropriate. All further indicated unless corrects maintenance fee notifica	form should be used : correspondence includi ed below or directed of tions.	for trange the herwise	smitting the ISSU Patent, advance of in Block 1, by (a						tould be completed where correspondence address as rate "FEE ADDRESS" for
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									(Depositor's name)
									(Signature)
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APPLICATION NO.	FILING DATE			FIRST NAMED INVENTOR			ATTORNEY DOCKET NO. CONFIRMATION NO.		
10/539,509	12/07/2005			Klaus Schultes			2	72983US0PCT	4808
TITLE OF INVENTION MATERIAL	: CORE AND SHELL I	PARTIC	LE FOR MODIF	YING IMPACT RESI	STA	NCE OF A MOUL	DABL	E POLY (METH) ACI	RYLATE
APPLN. TYPE	SMALL ENTITY	IS	SUE FEE DUE	PUBLICATION FEE D	UE	PREV. PAID ISSU	E FEE	TOTAL FEE(S) DUE	DATE DUE
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EXAM	IINER		ART UNIT	CLASS-SUBCLASS					
LE, H	OA T		I794	428-407000					
1. Change of correspondence address or indication of "Fee Address" (37 (FR 1.363).  ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.  ☐ "Fee Address" indication (or "Fee Address" indication form PTO/SB/147, 80 (30.00 cm or recent) attached. Use of a Customer Number is required.  A SSIGNIEE NAME AND RESIDENCE DATA TO BE PRINTED ON				(2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patient attorneys or agents. If no name is listed, no name will be printed.					
PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 57 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.  (A) NAME OF ASSIGNEE  (B) RESIDENCE: (CITY and STATE OR COUNTRY)									
Please check the appropr	iate assignee category or	catego	ries (will not be pr	rinted on the patent):		Individual 🚨 Co	orporati	on or other private gro	up entity Government
4a. The following fee(s) are submitted:    Issue Fee   Publication Fee (No small entity discount permitted)   Advance Order - # of Copies				4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)					
	s SMALL ENTITY stat	us. See	37 CFR I.27.					TITY status. See 37 CF	
NOTE: The Issue Fee an interest as shown by the	d Publication Fee (if req records of the United Sta	uired) ites Pat	will not be accepte ent and Trademark	d from anyone other the Office.	nan t	he applicant; a regi	stered a	ittorney or agent; or th	e assignee or other party in
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Typed or printed name				Registration No.					
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# UNITED STATES PATENT AND TRADEMARK OFFICE

#### UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

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DATE MAILED: 11/25/2009

APPLICATION NO. FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/539,509	12/07/2005	Klaus Schultes	272983US0PCT	4808
22850 75	90 11/25/2009		EXAM	UNER
OBLON, SPIVA	K, MCCLELLAND	LE, H	OA T	
1940 DUKE STRE		ART UNIT	PAPER NUMBER	
ALEXANDRIA, V	A 22314	1794		

# Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 290 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 290 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

# Notice of Allowability

Application No.	Applicant(s)
10/539,509	SCHULTES ET AL.
Examiner	Art Unit
J (Holly) T Lo	1704

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address-All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

- 1. This communication is responsive to the Appeal Brief fied September 3, 2009.
- The allowed claim(s) is/are 1-10.
- 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All b) Some\* c) None of the:
    - 1. T Certified copies of the priority documents have been received.
    - Certified copies of the priority documents have been received in Application No.
      - Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
  - \* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

- 4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
- 5. CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) Thereto or 2) to Paper No./Mail Date
  - (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

#### Attachment(s)

- 1. Notice of References Cited (PTO-892)
- 2. Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3. Information Disclosure Statements (PTO/SB/08),
- Paper No./Mail Date 07/2009
- Examiner's Comment Regarding Requirement for Deposit of Biological Material
- 5. Notice of Informal Patent Application
- Interview Summary (PTO-413), Paper No./Mail Date
- 7. X Examiner's Amendment/Comment
- 8. X Examiner's Statement of Reasons for Allowance
- Other \_\_\_\_\_.

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Art Unit: 1794

# EXAMINER'S AMENDMENT

 An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Applicant's Representative, Harris Pitlick, on November 19, 2009.

The application has been amended as follows:

# In the abstract:

Page 63, line 10, the period has been changed to semicolon (;);

line 12, the phrase, "The present invention further relates to" has been deleted.

End of Amendment.

Application/Control Number: 10/539,509 Page 3

Art Unit: 1794

### REASONS FOR ALLOWANCE

- 3. In view of the new arguments presented in the Appeal Brief filed September 3. 2009, the following is an examiner's statement of reasons for allowance: The prior art reference, US Patent No. 6.172.135 to Fraser et al ("US'135"), does not recognize the critical content of styrene unit in the first shell polymer. US'135 teaches a core-shell particles comprising a first shell polymer containing from zero to 25wt% of a styrene monomer unit (claim 1), preferably 14-25 wt% (claim 6). As shown in Tables 1 and 2 of the instant specification, in Example VB1 where the styrene monomer in the first shell (i.e. Emulsion 2) of the core-shell particle is about 22% (3453 g of styrene divided to (15655 + 172g) of total acrylate monomers), which is within the general and preferred range taught in US'135 but outside the claimed range of styrene monomer, the impact strength at below O°C of the resulting core-shell particle is significantly lower than that of the core-shell particle according to the claimed invention. See Table 2 of the instant specification. Similarly, in Example VB2 where the styrene monomer is not present in the first shell of the core-shell particle, the impact strength at below O°C of the resulting core-shell particle is significantly lower than that of the core-shell particle according to the claimed invention. See Table 2 of the instant specification.
- 4. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Application/Control Number: 10/539,509

Art Unit: 1794

 Any inquiry concerning this communication or earlier communications from the examiner should be directed to H. (Holly) T. Le whose telephone number is 571-272-1511. The examiner can normally be reached on 12:30 p.m. to 9:00 p.m. (EST), Mondays to Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Callie Shosho can be reached on 571-272-1123. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/H. (Holly) T. Le/ Primary Examiner, Art Unit 1794

November 18, 2009